

ABSTRACT

A method for making a braze joint across a discontinuity in a work piece using alternating current. A filler metal is pre-placed at a location sufficiently close to the discontinuity such that, when an alternating current is applied across a work piece to heat the work piece and melt the filler metal, the filler metal is drawn into the discontinuity. The alternating current is maintained for a set residence time, generally less than 10 seconds and more particularly less than 3 seconds. The alternating current is then altered, generally by reducing the current and/or voltage such that the filler metal can solidify to form a braze joint of desired quality and thickness.